REMARKS

Favorable reconsideration of this application, in view of the following remarks, is respectfully requested.

Claims 17, 19, 21-26, 28-34, 36-42, 44-50 and 52-64 are pending in this application.

Claims 58-64 are newly added by this Amendment. No claims are cancelled by this Amendment.

Applicants acknowledge with appreciation the Examiner's indication that certified copies of the priority documents were accepted by the United States Patent and Trademark Office (USPTO) and that the references included in the Information Disclosure Statement filed November 24, 2004, were considered.

Drawings

Applicants respectfully request that the Examiner acknowledge that the drawings filed on March 19, 2004 are accepted by the USPTO.

Claim Rejections under 35 U.S.C. § 103

Claims 17-19, 21-26, 28-34, 36-42, 44-50 and 52-57 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Okada (U.S. Pub. No. 2002/0046328, herein Okada '328) and Okada et al. (U.S. Patent No. 6,181,870, herein Okada '870) in further view of Kikuchi et al. (U.S. Patent No. 5,870,523, herein Kikuchi). Applicants respectfully traverse this rejection as detailed below.

CLAIMS

Initially, Applicants respectfully note that independent claim 17 is directed towards a recording medium having a data structure including a data area and a navigation area for managing reproduction of at least video data representing multiple reproduction paths. Claim 17 recites, inter alia, "a navigation area storing a first navigation unit, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one second navigation unit referencing more than one third navigation unit, each third navigation unit associated with a different one of the multiple reproduction paths and indicating a separate file of video data in the data area to reproduce."

Applicants respectfully submit that at least the above-emphasized features of independent claim 17 and the similar features of independent claims 26, 34, 42 and new claim 58 patentably distinguish all of claims over the cited references of Okada '328, Okada '870 and Kikuchi. To support this assertion, below the Applicants address each reference individually and then issues relating to the combination of the references.

OKADA '328

Regarding Okada '328, the Examiner asserts that Okada '328 discloses recording multiple channels and navigation data. The Examiner indicates that the data shown in FIGS. 41-44 represents navigation data for multiple channels. The Examiner has not made an attempt to specify, which data and/or identifiers shown in the tables of FIGS. 41-44 are believed to teach or suggest the features of the navigation area of claim 17. Accordingly, Applicants assume the Examiner is relying on either Okada '870 or Kikuchi as teaching the features of the navigation area of claim 17.

OKADA '870

Regarding Okada '870, the Examiner asserts "it would have been obvious in view of Okada et al. (US 6,181,870) to store this navigation data to the DVD/DISK and the examiner further asserts that the DVD data structures are also taught and further obvious to record stream even 4 in accord to this create Navigation data, such as Fig. 71 etc......, for example in accord to the teachings of Okada." In light of the above, it appears that the Examiner is asserting that (1) Okada '870 teaches storing navigation data on a disk and (2) FIG. 71 of Okada '870 represents Navigation data that may be used to modify the teachings of Okada '328.

However, the Examiner fails to indicate, which portions of FIG. 71 are believed to correspond to the features of the navigation area recited in claim 17. Accordingly, Applicants respectfully submit that Okada '870, like Okada '320, at least fails to disclose, teach or suggest the features of the navigation area recited in claim 17 and the similar features of independent claims 26, 34 and 42.

<u>KIKUCHI</u>

Regarding Kikuchi, the Examiner asserts the following at page 8, line 21 to page 9, line 8 of the Office Action mailed October 5, 2006.

Fig. 35 A, shows a table being DSI data recorded in each <u>Nav. Pack</u> of each VOBU having a <u>NAV pack header 86</u> shown in Fig. 25, <u>DSI area 115</u> of NAV pack 86, further based on Fig. 35 A & 35 B,, shows <u>V FWD Exist 1</u>....., as well as Fig. 35 C, showing <u>V BWD Exist 1</u>...., which reads on and meets the limitation of a field indicating referencing of files either in the forward or reverse reproduction paths, as well as a plurality as shown in Fig. 35 per navigation DSI data fields, as taught by Kikuchi, this search information col. 20,

¹ Office Action mailed October 5, 2006, page 7, lines 18-38.

² Office Action mailed October 5, 2006, page 2, line 22 to page 3, line 2.

line 66 to col. 23-, used for identifying locations by using addresses in the order of forward and backward playback operations, using this information to perform fast playback operations, col. 1, lines 45-, as taught.

Therefore, it would have been obvious to those skilled in the art at the time of the invention modify the combination by providing a table in navigation areas to providing multiple addresses per navigation area and indicating information of whether units exist, therefore an address to file or image or not, to use during a forward or reverse search operation to files, being images to perform fast reproduction operations as taught by Kikuchi. (Emphasis Added)

First, Applicants respectfully submit that it is unclear what features of Kikuchi identified above are believed to correspond to a "first navigation unit," "second navigation unit" and "third navigation unit" recited in claim 17.

Instead, the Examiner points to DSI data, Nav. Pack 86, Nav pack Header 110, DSI area 115, V_FWD_Exist 1 and V_BWD_Exist 1. Because the Examiner identified at least five different items, it is unclear as to which of the five different items are believe to correspond to each of the three navigation units recited independent claim 17.

However, Applicants explain below why each of the five identified items, no matter how interpreted, cannot correspond to the first navigation unit, second navigation unit and third navigation unit recited in claim 17.

Nav. Pack 86

In Kikuchi, a navigation pack 86 is included in each VOBU. The navigation pack 86 as shown in FIG. 25 includes a pack header 110, a system header 111, a PCI packet 116 and a DSI packet 117. The pack header 110, system header 111, PCI packet 116 and DSI packet 117 merely represent information included in the navigation pack 86. There is no indication in Kikuchi that the order of the information included in the navigation pack 86 may be changed. Accordingly, the navigation pack 86 does not control a reproduction order of the pack header

110, a system header 111, a PCI packet 116 or a DSI packet 117. Accordingly, the navigation pack 86 cannot correspond to the first navigation unit recited in claim 17.

Further, the navigation pack 86 cannot correspond to a second navigation unit recited in claim 17 because a reproduction order of a navigation pack 86 within a VOBU is not changed and thus, there is no need to control a reproduction order of a navigation pack 86 within a VOBU.

Lastly, each navigation pack 86 described in Kikuchi is associated with the same reproduction path. Each navigation pack 86 relates to reproducing the same reproduction path in a forward direction or a reverse direction. Each navigation pack 86 is not associated with a different reproduction path.

Therefore, the navigation pack 86 cannot correspond to the first navigation unit, second navigation unit or third navigation unit at least because claim 17 recites "a first navigation unit, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one second navigation unit referencing more than one third navigation unit, each third navigation unit associated with a different one of the multiple reproduction paths and indicating a separate file of video data in the data area to reproduce."

Nav pack Header 110, DSI area 115, V FWD Exist 1 and V BWD Exist 1

V_FWD_EXIST 1 and V_BWD_EXIST 1 are data included in the DSI area 115. Further, the DSI area 115 and Nav pack header 110 are both included in the navigation pack 86. Accordingly, each of the Nav pack Header 110, DSI area 115, V_FWD_Exist 1 and V_BWD_Exist 1 are included in the navigation pack 86. Because a navigation pack 86 cannot correspond to the first navigation unit, second navigation unit, or third navigation unit recited in

the claims, none of the items included in the navigation pack 86 can correspond to the first navigation unit, second navigation unit and third navigation unit.

COMBINATION OF OKADA '328, OKADA '870 AND KIKUCHI

In addition to the arguments above indicating that none of the cited references disclose, teach or suggest the above-emphasized features of independent claim 17, Applicants also respectfully submit that it is improper to modify the navigation data of Okada '328 based on the disclosure of either Okada '870 or Kikuchi as detailed below.

Both Okada '870 and Kikuchi are directed towards reproducing data from a single reproduction path. Accordingly, the portions of Okada '870 and Kikuchi identified by the Examiner as being navigation data are only applicable for navigating data from a single reproduction path.

For the sake of argument, even if the Examiner determines that Okada '870 and/or Kikuchi discloses a navigation area including a first navigation unit, second navigation unit and third navigation unit; combining a navigation area of Okada '870 or Kikuchi with Okada '328 would result in having first, second and third navigation units for each reproduction path.

Therefore, the Examiner's proposed combination would still fail to disclose all of the features of the independent claims.

In light of above, Applicants respectfully request that the rejections of claims 17-19, 21-26, 28-34, 36-42, 44-50 and 52-57 under 35 U.S.C. § 103(a) as unpatentable over the combination of Okada '328, Okada '870 and Kikuchi be withdrawn.

New Claims

Applicants respectfully submit that no new matter is added by claims 58-64. Further,

Applicants note that new independent claim 58 includes features somewhat similar to
independent claim 17 discussed above and thus, claims 58-64 are allowable for at least the same
reasons discussed above regarding independent claim 17.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of each of claims pending in this application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

Ву

Gary D. Yacuta, Rog/No.35,41

P.O. Box 8910

Reston, Virginia 20195

(703) 668-8000